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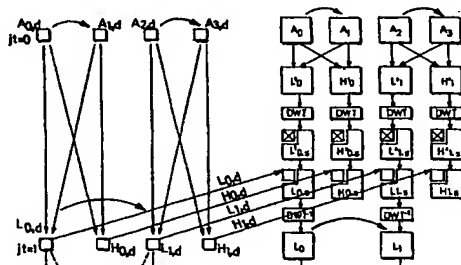
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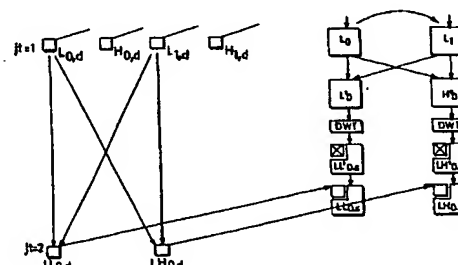
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(54) Title: **DRIFT-FREE VIDEO ENCODING AND DECODING METHOD, AND CORRESPONDING DEVICES**



A



B

(57) Abstract: Three-dimensional (3D) subband coding schemes use motion compensation in their temporal filtering stage. Unfortunately, this procedure introduces two drawbacks : (a) the MC being applied at the full resolution, a drift appears when decoding at a lower resolution, and (b) all the motion vectors estimated at full resolution are transmitted, which is a waste of bits. According to the invention, a low resolution sequence is first obtained by generating from the original input sequence of frames - by means of a wavelet decomposition - a sequence of low resolution frames and performing on them a motion compensated spatio-temporal analysis. Then, a motion compensated spatio-temporal analysis of each full resolution group of frames is performed, and the low frequency subbands of the decomposition are finally replaced, at each temporal decomposition level, by the corresponding spatio-temporal subbands of the generated low resolution sequence. The modified sequence thus obtained is finally coded. Thanks to this approach, a good behavior at low resolution is maintained (no more drift) while getting closer to the performance of a classic 3D subband codec at full resolution.

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